

WHAT IS CLAIMED IS:

1. A tissue patch for treatment of a lesion in an alimentary tract of a patient, comprising:
  - a substrate;
  - a tissue implant attached to the substrate; and
  - a protective liner covering at least a portion of the tissue implant.
2. A tissue patch according to claim 1, wherein the tissue implant is placed on a surface of the substrate.
3. A tissue patch according to claim 1, wherein the tissue implant is embedded in the substrate in the form of a cellular suspension.
4. A tissue patch according to claim 1, wherein the substrate has a first surface for receiving the tissue implant and a second surface opposite to the first surface for facing a lumen of the alimentary tract.
5. A tissue patch according to claim 4, wherein the tissue implant occupies an area in the first surface of the substrate, the area being less than the surface area of the first surface.
6. A tissue patch according to claim 5, wherein an adhesive material for attaching the protective liner occupies at least a portion of the first surface other than the area occupied by the tissue implant.
7. A tissue patch according to claim 1, further comprising an adhesive material to hold the patch proximate the lesion.
8. A tissue patch according to claim 7, wherein the adhesive material includes cyano-acrylate.

9. A tissue patch according to claim 7, wherein the protective liner is attached to the substrate via the adhesive material.
10. A tissue patch according to claim 1, wherein the protective liner is removably attached to at least one of the substrate and the tissue implant.
11. A tissue patch according to claim 10, wherein the protective liner is configured to be peeled away from the at least one of the substrate and the tissue implant.
12. A tissue patch according to claim 1, wherein the protective liner is removably attached to the substrate.
13. A tissue patch according to claim 1, wherein the substrate is a bio-absorbable gel.
14. A tissue patch according to claim 13, wherein the substrate includes a bio-absorbable material having a predetermined thickness designed to last for a predetermined time period required for healing of the lesion so as to protect the tissue implant from conditions in the alimentary tract.
15. A tissue patch according to claim 1, wherein the substrate includes a therapeutic agent selected from a group consisting of human growth hormone, generically engineered cells, antibiotics, analgesics, and pH sensitive or reactive chemicals.
16. A tissue patch according to claim 15, wherein the therapeutic agent is infused into the substrate.

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17. A tissue patch according to claim 15, wherein the therapeutic agent is layered in a predetermined depth within the substrate so that the therapeutic agent activates at a predetermined time.
18. A tissue patch according to claim 1, wherein the patch is configured to be delivered endoluminally.
19. A tissue patch according to claim 18, wherein the patch is configured to be folded into a contracted state during delivery into the lesion.
20. A tissue patch according to claim 19, wherein the patch is capable of expanding upon deployment into the lesion.
21. A tissue patch according to claim 1, wherein the patch is configured to be rolled into a cylindrical shape.
22. A tissue patch according to claim 1, wherein the tissue implant is a genetically engineered tissue.
23. A tissue patch according to claim 1, further comprising a carrier attached to the substrate.
24. A tissue patch according to claim 23, wherein the carrier is configured be peeled away from the substrate.
25. A method of treating a lesion in a lumen of patient's body, comprising:
  - providing a tissue patch having a tissue implant attached to a substrate
  - and a protective liner covering at least a portion of the tissue
  - implant;
  - forming the tissue patch into a contracted state;

inserting the tissue patch in the contracted state into a lumen  
containing the lesion;  
positioning the tissue patch in the vicinity of the lesion;  
removing the protective liner to reveal the tissue implant; and  
placing the tissue implant in the lesion.

26. A method according to claim 25, further comprising placing the tissue patch on a portion of a catheter for inserting the tissue patch in the contracted state.
27. A method according to claim 25, further comprising expanding the tissue patch from the contracted state before the step of removing the protective liner.
28. A method according to claim 25, wherein an adhesive material is provided on the substrate and the protective liner attaches to the adhesive material.
29. A method according to claim 25, wherein at least a portion of the substrate includes an adhesive material.
30. A method according to claim 25, wherein the tissue implant is placed on a surface of the substrate.
31. A method according to claim 25, wherein the tissue implant is embedded in the substrate in a form of a cellular suspension.
32. A method according to claim 25, wherein the substrate is a bio-absorbable gel.
33. A method according to claim 25, further comprising attaching a carrier to the substrate on a surface opposite to the surface facing the lesion and removing the carrier from the substrate after the tissue implant is placed in the lesion.

34. A method according to claim 25, wherein the tissue implant is an engineered tissue.
35. A method according to claim 25, wherein forming the tissue patch into a contracted state includes folding the tissue patch.
36. A method according to claim 25, wherein forming the tissue patch into a contracted state includes rolling the tissue patch into a cylindrical shape.